

## ***Aristea ecklonii* Baker (Iridaceae) – a new record for India**

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### **Abstract**

*Aristea ecklonii* Baker, of Iridaceae, is reported for the first time from India. Its detailed description, illustration and other relevant notes are provided.

During our floristic forays into the High Ranges on the Western Ghats of Kerala, we found a particularly interesting Iridaceae plant growing wild along the sides of Munnar-Eravikulam road, at about 1000 m MSL and in the adjoining plantations and wastelands. Naturalized and growing abundant with small blue flowers, it could have been passed off as a common element, but it caught our attention because, Iridaceae is not particularly known for such occurrence in the wild in India, especially in the southern parts. With about 60 genera and 800 species, mainly concentrated in tropical America and Southern Africa, it is known to have only a few representative genera wild in India (*Belamcanda*, *Crocus* and *Iris*) while species of *Eleutherine*, *Gladiolus*, *Freesia*, *Ixia* and *Tigridia* are known only under cultivation (Nayar, 1984; Karthikeyan *et al.*, 1989). Our material did not match with any of these genera. Published literature on Indian flora were not of any help. So we referred the material to Dr. Peter Goldblatt, MO, who identified it as *Aristea* Aiton a new generic record for India.

The genus *Aristea*, with about 50 species, mainly occurs in tropical and Southern Africa and Madagascar (Mabberly, 1987) and Jamaica (Adams, 1972). It is not yet adequately taxonomically studied. The only available work is the monograph of the genus by Weimark (1940), where he recognised 8 sections. Our material, with its elongated, cylindric or trigonous capsules with many disciform seeds, belongs to the sect. *Pseudaristea* Pak.

From Weimark's account of the species, it is apparent that in Africa this is a very highly variable taxon, especially with respect to the nature of inflorescence, width of leaves, size and development of bracts and size and shape of capsules, so much so that various authors have treated these variants under different binomials. Weimark (1940) has found these variations often overlap, and that a satisfactory infraspecific classification is impossible.

It is not possible to ascertain how this African element has reached the Western Ghats of India. In any case, there seems to be no chance of it being an escape from cultivation, because this plant has seldom been noted under cultivation anywhere around. Any way, a detailed description and illustration of this new entrant are provided here, as they would be of any help to students of Indian plants.

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*Aristea ecklonii* Baker, J. Linn. Soc. 16: 112. 1877 & in Handb. Irid. 144. 1892; Klatt, Abh. Naturf. Ges. Italle 15: 381. 1882; Weimark, Lunds Univ. Arsskr. N.F. Avd. 2, 36(1): 58. 1940; Adams, Fl. Pl. Jamaica: Irid. 84. 1972.

*Aristea dichotoma* Ecklon in Sched. ex Klatt, Linnaea 34: 555. 1865-66, non Ker.

*Aristea paniculata* Pax, Bot. Jahrb. 15: 151. 1892; Baker, Fl. Trop. Africa 7: 348. 1898.

*Aristea maitlandii* Hutch., in Hutch. & Dalz., Fl. W. Trop. Africa II, 2: 374. 1936, *nomen*.

(Fig. 1)

Herbs to about 50 cm tall, usually growing in clumps. Rhizome obliquely erect, 1-1.5 cm thick. Leaves basal and cauline, basal leaves 5-8, bifarious, 30-40 x 1.1.5 cm, linear-lanceolate, acute or acuminate at apex, plicate, sheathing at base, prominently 5-7 nerved, glabrous; lower cauline leaves like basal leaves, upper ones gradually smaller, bract-like on the inflorescence, keeled and forming wings on either side of the stem. Stem 20-60 cm long, subterete, geniculate above. Inflorescence of several flowered rhipidia, in the axils of bract-like leaves. Rhipidia solitary or paired, peduncled, peduncle longer than subtending leaves, to 8 cm long, green, glabrous, winged on either side. Flowers 15-18 mm across, short-pedicelled, bracteate, bisexual, regular. Bracts scarious, linear-lanceolate, to 1 cm long. Pedicels enlarging in fruits to 12 mm long. Tepals 6 in two whorls, deep blue; outer three oblanceolate-subobtusate, 10-13 x 4-6 mm; inner three obovate-obtusate, 13-15 x 5-7 mm, entire, stamens 3, erect; filaments blue, glabrous, to 5 mm long, anthers 2.5 mm long, bright yellow, sagittate. Ovary trigonous to 7 mm long, glabrous, 3-celled with many ovules in each; style erect, to 7 mm long, bluish; stigma shortly 3-lobed, lobes capitate. Capsules sharply trigonous, with a median longitudinal groove on each side and with faint transverse grooves between seeds, 1-3 cm long, 3-4 mm in diameter, green to begin with, black when mature, dehiscent septifragally from top, valves twisted and reflexed. Seeds many, discoid, brownish.

*Ecology:* Found growing luxuriantly in waste places, grasslands and roadsides along Munnar-Eravikulam road, flowering and fruiting during October-December.

*Specimens examined:* Kerala: Munnar, Umesh 1981, Sudha 1980, Sheeba Jose 1994; Sivarajan 42140 (CALI).

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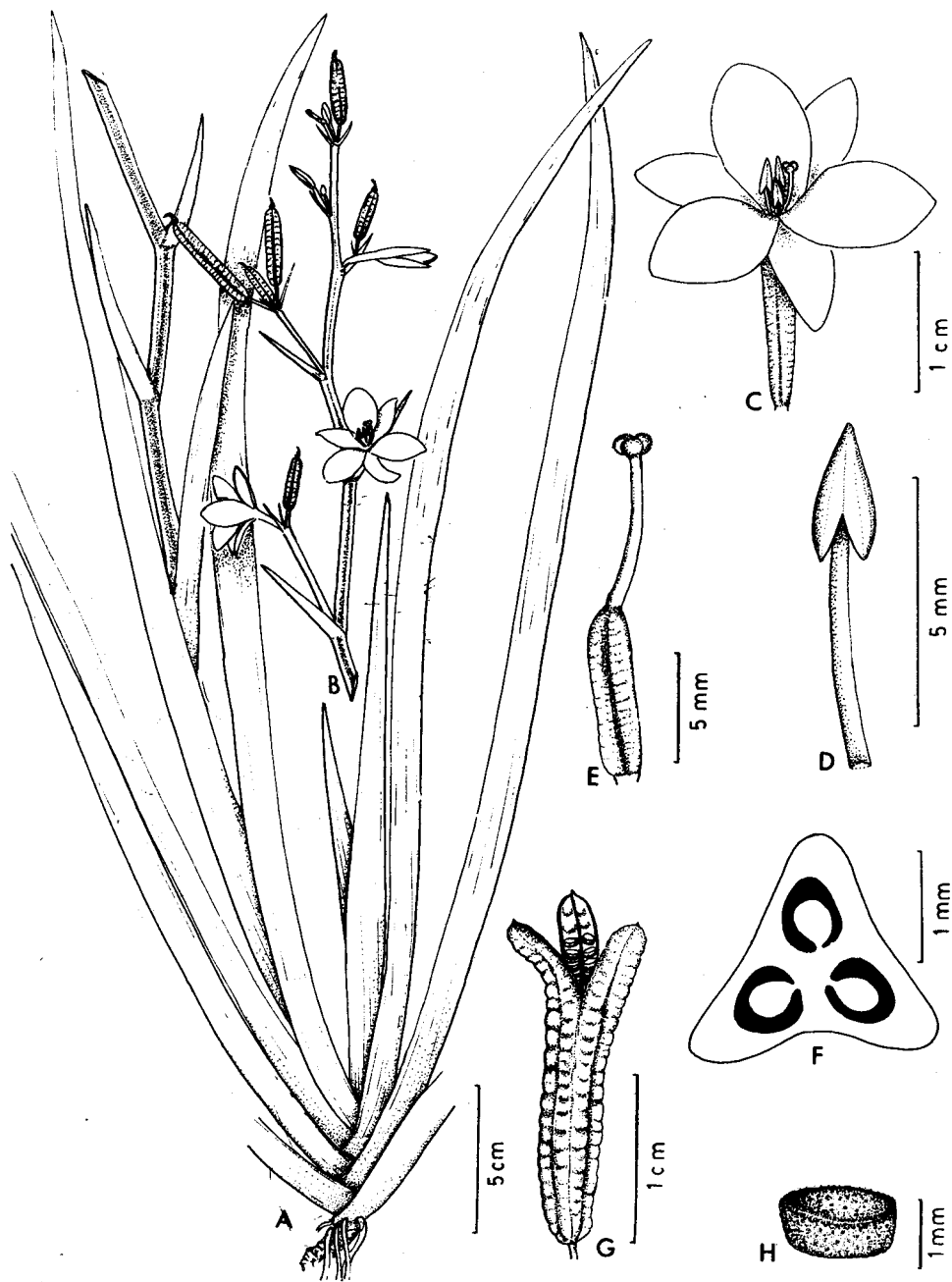


Fig. 1. *Aristea ecklonii*. A. Habit; B. Inflorescence; C. Flower; D. Stamen; E. Pistil; F. c. s. of ovary; G. Fruit showing dehiscence; H. Seed (from Sivarajan 42140).

**V. V. Sivarajan and A. K. Pradeep****Literature cited**

- Adams, C. D. 1992. *Flowering plants of Jamaica*. Jamaica.
- Karthikeyan, S., Jain, S. K., Nayar M. P. and Sanjappa, M. 1989. *Florae Indicae Enumeratio: Monocotyledonae*, Calcutta.
- Mabberly, D. J. 1987. *The Plantbook*, Cambridge.
- Nayar, M. P. 1984. *Key works to the taxonomy of flowering plants of India*, Calcutta, Vol. 2.
- Weimark, H. 1940. Monograph of the genus *Aristea*. *Acta Univ. Lund. (Lunds Univ. Arssk.) N. F. Ard.* 2, 36 (1): 1-140.